

AGREEMENT

BETWEEN

THE UNITED STATES NATIONAL OCEANIC
AND ATMOSPHERIC ADMINISTRATION

AND

THE EUROPEAN ORGANISATION
FOR THE EXPLOITATION
OF METEOROLOGICAL SATELLITES

ON

AN INITIAL JOINT POLAR-ORBITING
OPERATIONAL SATELLITE SYSTEM

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PREAMBLE

The United States National Oceanic and Atmospheric Administration (hereinafter referred to as "NOAA"), representing the interests of the National Aeronautics and Space Administration, the Department of Defense, and other interested U.S. Government agencies,

and

The European Organisation for the Exploitation of Meteorological Satellites established by the Convention opened for signature in Geneva on May 24, 1983 and entered into force on June 19, 1986, (hereinafter referred to as "EUMETSAT"),

RECALLING that EUMETSAT and NOAA have enjoyed long-standing and fruitful cooperation in the field of Earth observation, witnessed by their cooperation in the development and operation of geostationary meteorological satellites,

RECALLING that EUMETSAT is responsible for the European METEOSAT Geostationary Satellite System and desires to make a contribution to a worldwide polar-orbiting operational system,

RECALLING that NOAA has launched and operates polar-orbiting operational satellites, which have unique Earth-observing capabilities, and has provided data from these satellites for worldwide use for thirty years,

RECOGNIZING the essential role environmental satellite data, particularly imaging and sounding, have had in global weather forecasting, and the importance of these data to research on climate change and other sectors of the global Earth observation and science user communities,

RECOGNIZING specifically the need to maintain continuity of these global environmental measurements from space-borne instruments in polar orbit,

RECOGNIZING the benefits to the meteorological, scientific, and applications communities in having rapid access to the data of these missions,

RECOGNIZING the need to promote the effective use of data from space for global climate change research and environmental monitoring,

NOTING the Agreement for Cooperation concerning the EUMETSAT Polar System and the ESA METOP-1 Programme between EUMETSAT and ESA and the EUMETSAT/Centre National d'Etudes Spatiales (CNES) Agreement for ARGOS for METOP-1 and METOP-2,

NOTING the Memorandum of Agreement among the Governments of the U.S., Canada and France concerning cooperation in a Search and Rescue Satellite System of September 11, 1995, and the Memorandum of Understanding between NOAA and CNES for the ARGOS Data Collection and Platform Location System of March 26, 1986 as amended for NOAA-N and NOAA-N',

NOTING the existing commitments of the United States, and several European States, to the Search and Rescue Program and that Program's long association with the operational polar-orbiting satellites,

NOTING that the United Kingdom Meteorological Office has contributed the Stratospheric Sounding Unit for flight on the NOAA polar-orbiting operational satellites since 1978 and shall provide the Advanced Microwave Sounding Unit-B for flight on NOAA K, L and M polar-orbiting operational satellites, as agreed to in the Memorandum of Understanding between NOAA and the Meteorological Office of the United Kingdom Ministry of Defence of February 14, 1986,

HAVE AGREED AS FOLLOWS:

Article 1 PURPOSE

- 1.1 This Agreement defines the terms of cooperation between NOAA and EUMETSAT, jointly referred to as the Parties, relating to an initial Joint Polar System (referred hereinafter as IJPS or IJP System) comprising two series of Joint Polar-orbiting Satellites and their respective Ground Segments. The purpose of this cooperation is to continue and improve the operational meteorological and environmental forecasting and global climate monitoring services of the Parties and thereby contribute to the wider objectives of the World Meteorological Organization (WMO) Global Observing System, the Global Climate Observing System, the United Nations Environmental Programme (UNEP), the Intergovernmental Oceanographic Commission (IOC), and other related programs. The IJP System addressed in this Agreement is intended to provide long-term continuity of observations from polar orbit, furnished by the United States since April 1, 1960.
- 1.2 Under the terms of this Agreement, NOAA shall provide spacecraft for flight in afternoon orbit and instruments for both NOAA and EUMETSAT spacecraft. NOAA shall make available global IJPS data acquired in the United States to EUMETSAT. EUMETSAT shall make available EUMETSAT spacecraft for flight in mid-morning orbit and instruments for both EUMETSAT and NOAA spacecraft. EUMETSAT shall make available global IJPS data acquired in Europe to NOAA.

Article 2 FUTURE COOPERATION

The Parties to this Agreement recognize the benefit to operational meteorological and environmental forecasting and global climate monitoring services of ensuring continuity beyond the current initial satellite series.

The Parties shall continue planning to extend the respective satellite series and to continue the uninterrupted availability of data from the system and generally to improve polar observations beyond the satellite system described in Article 3.

Article 3 GENERAL SYSTEM DESCRIPTION

The IJP System consists of the following major elements: EUMETSAT and NOAA spacecraft, instrumentation, and ground segments. The spacecraft and instrumentation together are referred to as the satellite. A general description of these major elements is provided below.

3.1 SPACECRAFT

The spacecraft covered by this Agreement consists of the following two series of operational spacecraft that maintain complementary polar orbits with morning and afternoon equatorial crossing times:

3.1.1 NOAA SERIES

NOAA N and N' to be flown consecutively in an orbit with an afternoon equatorial crossing time (hereinafter "the NOAA spacecraft").

3.1.2 EUROPEAN SERIES

METOP 1 and METOP 2 to be flown consecutively in an orbit with a mid-morning equatorial crossing time (hereinafter "the EUMETSAT spacecraft").

3.2 INSTRUMENTATION

The IJPS payload consists of two elements: a payload common to both spacecraft and an additional payload, which is different on both spacecraft.

3.2.1 The common payload instruments to be provided by NOAA for the NOAA and EUMETSAT spacecraft consists of the:

- 1) Advanced Very High Resolution Radiometer (AVHRR);
- 2) High-Resolution Infrared Sounder (HIRS);
- 3) Advanced Microwave Sounding Unit (AMSU-A);
- 4) Space Environment Monitor (SEM);
- 5) Satellite-Aided Search and Rescue instrument (SARSAT).

The additional payload instrument to be provided by NOAA for the NOAA spacecraft is the Solar Backscatter Ultra Violet monitor (SBUV).

3.2.2 The common payload instrument to be provided by EUMETSAT for the NOAA and EUMETSAT spacecraft is the Microwave Humidity Sounder (MHS).

The additional payload instruments to be provided by EUMETSAT for flight on the EUMETSAT spacecraft consist of the:

- 1) Infrared Atmospheric Sounding Interferometer (IASI);
- 2) Advanced Scatterometer (ASCAT);
- 3) Ozone Monitoring Instrument (OMI);
- 4) Global Positioning System - Sounder (GPS -S)

3.2.3 The Data Collection and Location System (ARGOS), which is a common payload instrument is provided by NOAA for NOAA-N and NOAA-N' and provided by EUMETSAT for METOP-1 and METOP-2.

3.2.4 IJPS launches need not necessarily be delayed due to the unavailability of an instrument payload provided by either Party. Also, the health and safety of a spacecraft may require actions, such as the deactivation of an instrument or interruption of data, which may adversely impact the mission of the other Party. Such interruption of data or deactivation of instruments requires prior consultation with the other Party if possible and immediate notification of the other Party in any event. However, the Parties shall make every effort to maintain the operational continuity of the IJP System.

3.2.5 Other instruments may fly on either of the two series of spacecraft (e.g. research instruments that may become operational). These instruments will be part of the IJPS.

3.2.6 NOAA and EUMETSAT will develop a data handling subsystem for their respective NOAA and EUMETSAT spacecraft, providing continuous and simultaneous direct broadcast of Automatic Picture Transmission (APT) for NOAA N and N' or Low Resolution Picture Transmission (LRPT) for METOP 1 and 2, and High Resolution Picture Transmission (HRPT) for NOAA N and N' or Second Generation HRPT for METOP 1 and 2.

3.3 GROUND SEGMENT

The NOAA Ground Segment for the NOAA spacecraft and the EUMETSAT Ground Segment for the EUMETSAT spacecraft each include:

- 3.3.1 At least one Spacecraft Control Center and a geographically separate backup;
- 3.3.2 At least one Command and Data Acquisition (CDA) ground station and a geographically separate backup;
- 3.3.3 At least one Data Processing, Distribution and Archive Facility;
- 3.3.4 Telecommunication capabilities between the Parties necessary to ensure the timely and reliable exchange of telemetry/housekeeping and level zero data from the IJP System.

Article 4 NOAA RESPONSIBILITIES

NOAA shall:

4.1 SPACECRAFT

- 4.1.1 Provide the two NOAA spacecraft described in Article 3.1.1;
- 4.1.2 Integrate and test the NOAA and EUMETSAT instruments described in Article 3.2 into the NOAA spacecraft;
- 4.1.3 After coordinating scheduling and other launch requirements with EUMETSAT, launch the NOAA spacecraft in time to ensure the uninterrupted availability of visible/infrared imager and sounder data and other data which the parties agree is critical. In particular, NOAA shall be prepared to launch NOAA N' within 120 days of the failure or anticipated failure of NOAA N or of the visible/infrared imager or sounder carried by NOAA N.
- 4.1.4 Operate the NOAA spacecraft;

4.2 INSTRUMENTS

- 4.2.1 Provide the instruments as described in Articles 3.2.1 and 3.2.3 and the data handling subsystem as described in Article 3.2.6 for the NOAA spacecraft;
- 4.2.2 Provide the electrical ground support equipment necessary to test the NOAA-provided instruments when not mounted on the EUMETSAT spacecraft as well as all mechanical and targeting equipment necessary for integration and testing;
- 4.2.3 Operate and monitor the instruments provided by EUMETSAT on the NOAA spacecraft;

4.3 GROUND SYSTEM

- 4.3.1 Provide a Spacecraft Control Center with backup, a Command and Data Acquisition (CDA) station with backup, and a Data Processing, Distribution and Archive Facility for the NOAA spacecraft as described in Article 3.3;
- 4.3.2 Integrate EUMETSAT instrument procedures with the overall operating procedures for the NOAA satellites;
- 4.3.3 Provide data access facilities for the EUMETSAT spacecraft during orbits that would otherwise be outside the range of the EUMETSAT CDA station;

4.4 ANOMALY OR EMERGENCY

Assist EUMETSAT in cases of anomaly or emergency situations.

4.5 DATA EXCHANGE

Make available to EUMETSAT all data collected by the IJP System in a timely manner in accordance with the provisions of Article 8.

4.6 SOFTWARE

Collaborate with EUMETSAT on development of software to utilize the IJPS data, as appropriate. Such cooperation by the Parties will include exchange of source and object code. Broad distribution of the resulting software will be on a not-for-profit basis. NOAA may collaborate with EUMETSAT on development of other software, as appropriate, in source and object form, and exchange the resulting software.

Article 5 EUMETSAT RESPONSIBILITIES

EUMETSAT shall:

5.1 SPACECRAFT

- 5.1.1 Provide the two EUMETSAT spacecraft described in Article 3.1.2;
- 5.1.2 Integrate and test the EUMETSAT and NOAA instruments described in Article 3.2 into the EUMETSAT spacecraft;
- 5.1.3 Launch the EUMETSAT spacecraft after determining the schedule and other launch requirements in coordination with NOAA with the intention of ensuring uninterrupted availability of visible/infrared imager and sounder data and other data the parties agree is critical.

Subject to unforeseen technical contingencies, METOP 2 will be available for launch within 18 months of the launch of METOP 1.

EUMETSAT shall endeavour to launch METOP 2 within 12 months of the unavailability of visible/infrared imager and sounder data and other data the parties agree is critical from METOP 1 except that if such failure occurs within 6 months of the launch of METOP 1, when EUMETSAT shall endeavour to launch METOP 2 as soon as possible.

- 5.1.4 Operate the EUMETSAT spacecraft.

5.2 INSTRUMENTS

- 5.2.1 Provide the instruments as described in Articles 3.2.2 and 3.2.3 and the data handling subsystem as described in Article 3.2.6 for the EUMETSAT spacecraft;
- 5.2.2 Provide the electrical ground support equipment necessary to test the EUMETSAT-provided instrument when not mounted on the NOAA spacecraft, as well as all mechanical and targeting equipment necessary for integration and testing;
- 5.2.3 Operate and monitor the instruments provided by NOAA on the EUMETSAT spacecraft;

5.3 GROUND SYSTEM

- 5.3.1 Provide a Spacecraft Control Center with backup, a Command and Data Acquisition (CDA) station with backup, and a Data Processing, Distribution and Archive Facility for the EUMETSAT satellites as described in Article 3.3;
- 5.3.2 Integrate NOAA instrument procedures with the overall operating procedures for the EUMETSAT satellites;
- 5.3.3 Provide satellite data access facilities for the NOAA spacecraft during orbits that would otherwise be outside the range of the NOAA CDA station;

5.4 ANOMALY OR EMERGENCY

Assist NOAA in cases of anomaly or emergency situations.

5.5 DATA EXCHANGE

Make available to NOAA all data collected by the IJP System in a timely manner in accordance with the provisions of Article 8.

5.6 SOFTWARE

Collaborate with NOAA on development of software to utilize the IJPS data, as appropriate. Such cooperation by the Parties will include exchange of source and object code. Broad distribution of the resulting software will be on a not-for-profit basis. EUMETSAT may collaborate with NOAA on development of other software, as appropriate, in source and object form, and exchange the resulting software.

Article 6 FUNDING

- 6.1 Each Party shall bear the costs of fulfilling its respective responsibilities. There shall be no exchange of funds between NOAA and EUMETSAT.
- 6.2 The financial obligations of NOAA and EUMETSAT under this Agreement are subject to the funding procedures of the respective Parties and to the availability of appropriated funds. EUMETSAT has approved the overall programme financial envelope through adoption of the EUMETSAT Polar System Programme, whereas NOAA must rely on yearly appropriations from the U.S. Congress. Recognizing the importance of the IJP System to U.S. missions and EUMETSAT's commitment to the IJP System, NOAA agrees that the funds necessary to meet its obligations under this Agreement will be included within the highest possible priority of its annual budget request.
- 6.3 The cost of transporting equipment required for the execution of this Agreement from one Party to a first destination of the other Party shall be borne by the Party dispatching the equipment. The receiving Party shall be responsible for any subsequent transport or return of the equipment to the Party of original dispatch.
- 6.4 Costs for telecommunications and related services provided by third parties for the exchange of data and relay of commands between the Parties if required shall be borne by the Party receiving the data unless otherwise agreed.

Article 7 RELEASE OF INFORMATION

7.1 EXCHANGE OF TECHNICAL DATA, GOODS AND SOFTWARE

Each Party shall transfer to the other Party those technical data, goods and software necessary to fulfil the responsibilities of the transferring Party under this Agreement, subject to the following:

- 7.1.1 The Parties shall exchange interface, integration, and safety data (excluding detailed design, manufacturing, and processing data, and associated software) without restrictions as to use or disclosure.
- 7.1.2 If a Party transfers technical data or software, other than those specified in paragraph 1 above, that are proprietary, and for which protection is to be maintained, that Party shall mark such data or software with a notice indicating that they shall not be used or disclosed by the receiving Party and its contractors and subcontractors except for the purposes of fulfilling the receiving Party's responsibilities under this Agreement, and that the data or software shall not be disclosed or retransferred to any other entity without prior written permission of the furnishing Party.

7.1.3 If a Party transfers technical data, software and goods that are to be protected for export control purposes, that Party shall mark with a notice, or otherwise specifically identify, such technical data, software or goods indicating that such data shall not be disclosed and that such data, software and goods shall not be used by the receiving Party and its contractors and subcontractors except for the purposes of fulfilling the receiving Party's responsibilities under this Agreement. The notice or identification shall also provide that such data and software shall not be disclosed, and that such data, software and goods shall not be retransferred, to any other entity without prior written permission of the furnishing Party.

7.1.4 The Parties shall abide by the terms of any notice or identification specified in this Article and to protect the marked or identified data, software and goods from unauthorized use or disclosure. To this end, each Party shall take all necessary steps, including ensuring appropriate contractual conditions in their contracts and subcontracts to ensure that contractors and subcontractors protect the marked or identified data, software or goods. The Parties are under no obligation to protect any unmarked or unidentified technical data, software or goods.

7.1.5 Nothing in this Agreement requires the Parties to transfer technical data, software and goods contrary to relevant laws relating to export controls.

7.2 RELEASE OF PUBLIC INFORMATION

Each Party may release to the public information of a general, non-technical nature regarding this Agreement and its implementation after ensuring, through consultation with the other Party when necessary, that this information is fairly and accurately represented.

Article 8 DATA POLICY

8.1 The Parties shall make available to each other all data collected by the IJP System without any conditions as to the Parties' official duty use.

8.2 All data from NOAA satellites will be provided to other users in accordance with the U.S. data policy.

8.3 All data from EUMETSAT satellites will be provided to other users in accordance with the EUMETSAT data policy. However, EUMETSAT will not control access to the data from the NOAA instruments on the EUMETSAT satellites. EUMETSAT will limit the application of its data policy concerning use of data from such NOAA instruments to the territories of its Member States.

8.4 Data denial of critical IJPS data for military purposes from instruments identified in 3.2. here above is subject to the Annex hereto. Reciprocal arrangements to those contained in the procedure in the Annex can be established between NOAA and EUMETSAT.

- 8.5 The policy set out in this Article does not apply to the SARSAT and ARGOS instruments.

Article 9 MANAGEMENT, COORDINATION AND CONSULTATION

9.1 MANAGEMENT AND CONSULTATION

While the Parties IJP System management structures remain independent, each Party shall consult as necessary with the other Party on any matters under its control which may affect the implementation of this Agreement.

9.2 COORDINATION AND IMPLEMENTATION

- 9.2.1 The Parties shall jointly establish and maintain the necessary documents associated with the interfaces between the NOAA and EUMETSAT activities.

In particular they shall develop and approve a Programme Implementation Plan which defines the detailed description of the IJP System and its operational specification.

The PIP shall set forth:

- a) the points-of-contact and management structure;
- b) details of instrumentation, spacecraft, and ground segment, launch coordination, deliverables, and delivery schedules for those equipment and facilities governed by this Agreement;
- c) the services and technical documents to be exchanged by the Parties, including those pertaining to instrument-spacecraft interfaces, pre-launch activities, instrument calibration, spacecraft operations, anomaly resolution, and IJPS data.

In the event of inconsistency between the provisions of the PIP and the Agreement, the text of the Agreement shall prevail.

- 9.2.2 Each Party shall nominate a programme manager responsible for the implementation of its own programme and ensuring close coordination between the NOAA and EUMETSAT responsibilities. The PIP shall be implemented and maintained by the Programme managers who shall ensure that it is consistent with this Agreement.
- 9.2.3 To facilitate the necessary level of consultation and coordination, a Committee alternately chaired by the respective programme managers supported by appropriate representatives from EUMETSAT and NOAA shall review the implementation of the Agreement.

- 9.2.4 NOAA and EUMETSAT shall each draw up a six monthly report on the execution of its tasks and communicate it to the other Party in order to prepare the Committee meetings which in principle shall also take place every six months. Apart from these regular meetings, the Parties shall organize joint meetings whenever matters of mutual interest need to be discussed. Such meetings shall, if required, include briefings on contracts concluded, with access to supporting documentation as necessary.

Article 10 LIABILITY

- 10.1 (a) NOAA and EUMETSAT agree to a cross-waiver of liability pursuant to which each Party waives all claims against any of the entities or persons listed below based on injury to persons or damage to property. This cross-waiver shall apply only if the person, entity or property causing the damage is involved in activities under this Agreement and the person, entity or property damaged is damaged by virtue of its involvement in activities under this Agreement. The cross-waiver shall apply to any claims for damage, whatever the legal basis for such claims, including but not limited to tort (including negligence of every degree and kind) and contract, against:
- (1) the other Party;
 - (2) a related entity of the other Party (contractor or subcontractor, collaborating organization, contractor or subcontractor of a collaborating organization);
 - (3) the employees of the other Party or its related entities.
- (b) In addition, each Party shall extend the cross-waiver of liability as set forth in Article 10.1 to its own related entities by requiring them, by contract or otherwise, to waive all claims against the entities identified in (1) through (3) above.
- (c) For avoidance of doubt, this cross-waiver of liability includes a cross-waiver of liability arising from the Convention on the International Liability for Damage Caused by Space Objects of March 29, 1972 (Liability Convention), where the person, entity or property causing the damage is involved in activities under this Agreement, and the person, entity or property damaged is damaged by virtue of its involvement in activities under this Agreement.
- (d) Notwithstanding the other provisions of Article 10.2 this cross-waiver of liability shall not be applicable to:
- (1) claims between a Party and its own related entities or between its own related entities;

- (2) claims made by a natural person, his/her estate, survivors, or subrogee for injury or death of such natural person;
 - (3) claims for damage caused by willful misconduct;
 - (4) intellectual property claims.
- (e) Nothing in this Article shall be construed to create the basis for a claim or suit where none would otherwise exist.
- 10.2 The Parties shall ensure that any agreement for the use of data resulting from this Agreement expressly provides that neither Party can guarantee the timeliness or suitability of these data for any purpose, and shall not be liable for any damage which may result from the defective operation of the IJP System.
- 10.3 In the event of a claim arising out of the Liability Convention as a result of activities under this Agreement, the Parties shall consult promptly on any potential liability, on any apportionment of such liability, and on the defense of such claim.

Article 11 TITLE AND RISK

Title and risk of loss and damage to supplies, defined for the purposes of this Article to include hardware and software provided under this Agreement is retained by the providing Party. If a supply is lost or damaged while in the possession of other than the providing Party, the providing Party, in consultation with the other Party, shall determine whether the providing Party shall restore the supply, keeping in mind the operational nature of the IJP System.

Article 12 SETTLEMENT OF DISPUTES

- 12.1 Any dispute in the interpretation or implementation of the terms of this Agreement that cannot be resolved by the Program Managers shall be referred to the Director of EUMETSAT and the NOAA Administrator for settlement.
- 12.2 Any dispute in the interpretation or implementation of the terms of this Agreement that cannot be resolved by the Director of EUMETSAT and the NOAA Administrator may, upon agreement of the Parties, be submitted to conciliation, mediation, arbitration or other form of dispute resolution.

Article 13
TAXES AND CUSTOMS

Each Party shall facilitate customs clearance and freedom from import duties, taxes or similar charges for System-related equipment moving between countries concerned. Further, each Party shall facilitate the issuance of any necessary visas and permits to staff engaged in the activities related to this Agreement.

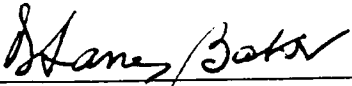
Article 14
ENTRY INTO FORCE, AMENDMENTS, TERMINATION, DURATION

- 14.1 This Agreement shall enter into force upon signature of both Parties and shall remain in force until the end of operation of the last spacecraft referred to in this Agreement.
- 14.2 The Agreement may be extended or amended by written agreement of the Parties.
- 14.3 In the event of, inter alia, major technical schedule or funding difficulties and if despite all reasonable efforts the difficulties cannot be resolved, either Party may terminate the Agreement ensuring, however, that any major disadvantages for the other Party are considered. If a Party gives notice of termination, the Parties shall reach agreement as soon as possible concerning the terms and conditions of termination, with a view toward ensuring the orderly reorganisation or termination of the IJP System.
- 14.4 Termination of this Agreement shall not affect a Party's continuing obligations under Articles 7, 8, and 10 unless otherwise agreed by the Parties.

IN WITNESS WHEREOF, the undersigned, being duly authorized, have signed this Agreement.


DONE at Washington, this 19th day of November, 1998, in two originals in the English language.

FOR THE
UNITED STATES NATIONAL
OCEANIC AND ATMOSPHERIC
ADMINISTRATION:



Administrator

FOR THE
EUROPEAN ORGANISATION FOR
THE EXPLOITATION OF
METEOROLOGICAL SATELLITES:



Director

ANNEX TO EUMETSAT / NOAA COOPERATION AGREEMENT

PROCEDURE AND PROCESS FOR DECISION MAKING
AND IMPLEMENTATION OF DATA DENIAL
ON U.S. INSTRUMENTS

1. U.S. Cabinet-level authority assess whether a crisis or war situation exists, or is developing, which would require selective denial of critical data from U.S. provided instruments on METOP-1 and -2 to an adversary.

Such assessment will be based on the following definitions:

Crisis or War

Crisis or war is an international situation involving U.S. and/or Allied operations which could range across the spectrum of military operations. This spectrum would include:

- a major regional conflict;
- a peacemaking or peacekeeping operation involving U.S. and Allied personnel and resources;
- a humanitarian operation involving U.S. and Allied personnel and resources;
- or
- a show of force operation (such as deploying naval or ground forces to reflect international disapproval) involving U.S. and Allied personnel and resources.

In all of these situations, a rigorous assessment would be carried out to determine whether U.S. and Allied personnel and resources could be adversely impacted by an adversary's access to the data.

Critical Data

Data denial may be applied to data which an adversary might use to support or enhance military planning and operations. For example, satellite visual, infrared or microwave imagery and infrared or microwave atmospheric sounding information have offensive and defensive military applications and are considered critical environmental data.

Adversary

A state or group of states or a politically unrecognized force within a state or group of states which pose a distinct threat to the U.S. or its Allies, especially regarding military operations.

2. Senior NOAA official briefs EUMETSAT Director on the situation and consults with him on the implementation of data denial.

3. U.S. Cabinet level authority analyzes the situation to determine whether in accordance with 1. above and the criteria hereunder the data from U.S. instruments should be denied. U.S. Cabinet level authority makes determination.

Criteria for determination:

- Whether a condition of crisis or war exists or is developing and whether the crisis or war poses an immediate and serious threat to U.S.-Allied national security objectives such as whether it affects the lives of U.S. or Allied personnel and resources;
 - An adversary's ability to receive and exploit environmental data from U.S. sensors for military purposes;
 - An adversary's ability to receive and exploit similar environmental data from other sources for military purposes;
 - What advantage the data from the U.S. instruments would provide an adversary, given that similar data may be available from other sources;
 - The impact of denying data to non-adversaries who may also be affected by data denial;
 - The U.S. would consider its international obligations, including those with EUMETSAT and its members, in making a decision on data denial.
4. Senior NOAA official consults with EUMETSAT Director and conveys to him the determination of the U.S. Cabinet level authority. Senior NOAA official requests EUMETSAT Director to implement data denial:
- to a specific user;
 - to a group of users;
 - to a geographic region; or
 - to all users except the National Meteorological Services of both the United States and the EUMETSAT Member States who will not redistribute the data except as agreed to by the Parties; and
 - within a specific time frame.
5. The EUMETSAT Director authorizes the implementation of data denial in accordance with the criteria and procedure above.

On request of either Party, consultations should take place at any time with a view to end data denial. Except as provided for in paragraph 6 hereafter data denial will stop 120 days after it starts.

ANNEX

6. If the U.S. Cabinet level authority reassesses the situation and determines in accordance with the above criteria that data denial shall be extended beyond 120 days or continued in a different form, steps 1 through 5 would apply again.
7. The Parties shall take appropriate measures to protect sensitive information exchanged under this annex.

